System Configuration Team (SCT)
Reasonable & Prudent Measure #26
1998 Gas Abatement Plan Subgroup Meeting Notes
February 3, 1998

I. Greetings and Introductions.

The February 3 meeting of a subgroup of the System Configuration Team, to develop a 1998 Gas Abatement Plan for submittal to the Washington Department of Ecology, was held at the National Marine Fisheries Service's offices in Portland, Oregon. The meeting was chaired by Mark Schneider of NMFS. The agenda and a list of attendees for the February 3 meeting are attached as Enclosures A and B.

The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced may be too lengthy to routinely include with the meeting notes; copies of all enclosures referred to in the minutes are available upon request from Kathy Ceballos of NMFS at 503/230-5420.

II. 1998 Gas Abatement Plan Discussion.

Our task today is to develop a document that will be submitted to the Washington Department of Ecology as a part of the response to the December letter from Eric Schlorff, Schneider began. That letter contained three requirements, documents WDOE wanted to see before making a decision about whether or not to approve the Biological Opinion spill program for 1998: a physical monitoring plan, a biological monitoring plan and a gas abatement plan.

The development of the physical and biological monitoring plans is now well under way, and the subject of our discussion today is the gas abatement plan, Schneider continued. The assignment the SCT was given -- and this body constitutes a subcommittee of the SCT -- was to list the gas abatement alternatives under consideration by the Corps of Engineers, together with the best available estimates of the reduction in total dissolved gas each of the alternatives is expected to provide and a schedule under which each of the alternatives might be expected to the implemented.

One clarification, said Ron Boyce of ODFW -- are just talking about the 1998 to 2003 time frame? Not necessarily, Schlorff replied -- if it's going to take seven or eight years to implement a

specific alternative, there's no reason to stop at 2003. The last page of the DGAS Phase II plan of study (attached as Enclosure C) lays out two alternative schedules for completion, said Jim Nielsen -- one concluding in 1999, the other in 2001. I assume the ISAB review is the determining factor in deciding when the study will be completed? Actually, there are probably two factors at work, replied Rock Peters of the Corps -- the first is the ISAB review, and the second is SCT funding of those programs.

One thing I would like to see is not just how long it will take to implement each alternative, said Schlorff, but the actual year each alternative could be completed, if, say, construction was to begin in 2000 or 2002. We should be able to provide that, Peters replied.

It sounds as though the Corps is saying that, until Phase II is complete, they will not be able to provide a list of preferred alternatives and an implementation schedule, Nielsen said. I don't think that's quite accurate, Peters replied -- I think the key is if we have a no-brainer decision, as would be the case if flow deflectors work as well as hoped at John Day and Ice Harbor, for example. If the region agrees with that, we could move out right now, as long as funding is available. However, we think the likelihood that the decision will be a no-brainer is extremely low, Peters said -- it is much more likely to be a very difficult decision.

In response to a question from Nielsen, Peters said the Corps will not be able to provide a recommended implementation schedule until DGAS Phase II is completed. The bottom line is, no matter which alternative is chosen, it is unlikely that construction will begin before 2000 or 2002, said Witt Anderson. At the Lower Snake projects, we really can't make a gas abatement decision until the larger 1999 decision is made and Congress appropriate funds, probably in 2000. Perhaps should recognize that there will be decision points in 1999, 2000 and 2001, and tack the necessary design and construction time for each alternative on to the end of that, Anderson said.

I guess what WDOE is really looking for is a schedule that tells us when we could expect that each alternative could be implemented, based on the schedule for the earlier decisions that have to be made, said Schlorff. I think it's up to you to tell us when you think the likely decision point is, he said. If it was up to us, we would probably say that decision point is 2001, Anderson said. Again, that will depend on what the ISAB review concludes, and what sort of regional acceptance that review finds.

Our concern about putting these kinds of schedules out on the street is that they may create false expectations, Peters said. There really isn't anything in this table that we would be willing to recommend at this time. In response to a question, Peters said the Corps doesn't have any alternatives currently on the table that will reduce total dissolved gas to 110% under all flow conditions, with the exception of stepped spillways and side-channel spillways, which have been ruled out by the Fish Facilities Design Review Work Group. In response to another question, Peters said the submerged outlet option will not reduce gas to 110% under all flow conditions, because submerged outlets simply pass whenever TDG levels are coming in to the project without reducing gas. With our current BiOp

spill program, even if 50% of the river flow is passing via submerged outlet, we will still be above 110% DGT under some conditions, he said.

Peters distributed Enclosure D, a Preliminary Summary of Estimated Gas Production, Cost and Construction Time for Potential Gas Abatement Alternatives at the Lower Snake and Columbia River Projects, dated January 23, 1998 (attached as Enclosure D). What you're saying, then, is that none of the options the Corps has identified will get us to the 110% level desired by the state and federal water quality agencies, said Boyce. Not under all conditions, no, Peters replied.

What's really important to us is to get a sense of what kinds of reductions in total dissolved gas can be expected from the various options on the table, and in what time frame, Schlorff said. That's what we're asking for -- a schedule of compliance.

It sounds as though the best we can do at this point is to say that, for Option X, design and construction is expected to take five years once the 1999 decision is made, Schneider said. Would that the acceptable? Yes, as long as we can also include some information on the expected range of gas reduction for each alternative, said Schlorff -- say 114%, plus or minus 2%, for submerged outlets with deflectors. That would be acceptable to us.

Schneider distributed Enclosure E, a memorandum for the record on the subject of the "Gas Abatement Program -- Preliminary Summary of Potential Gas Abatement Strategies for Lower Snake and Columbia River Projects." The group spent some minutes going through this document, providing a few specific comments. On page 2, under "Tasks and Activities," Schlorff said he sees little value in this section, observing that the flow chart is more confusing than illuminating, in the context of the plan of action.

Moving on, Schlorff said the "Numerical Model Development" section is also unnecessary; it contains elements that do not agree with how standards are developed, he said. In particular, he said the assertion that "The 110% TDG water quality standard... has been questioned based upon rudimentary in-river sampling of smolts during 1994 and 1995" is not a valid statement, and should be eliminated. Similarly, Schlorff suggested that the latter part of paragraph 3 of this section, beginning with "The model will be developed to simulate dissolved gas production..." should also be eliminated.

Schlorff continued on to say that, in his opinion, the paragraph titled "System-wide biological-benefit analysis" on page 6 could be eliminated, as could the second paragraph in the "Changes in plan of study" paragraph on page 7. Some minutes of further discussion yielded the conclusion that it is probably not necessary to include Enclosure C (the DGAS Phase II plan of study) in the gas abatement plan submitted to WDOE, except as an attachment. There is some good date information on page 5 that you may want to include, said Schlorff.

Items 4.2.1 through 4.2.6 on pages 4 and 5 (of Enclosure C) provide a fairly definite picture

about how much time each of the phases of implementation will take, Schneider said -- perhaps we could superimpose these items on the 1999 decision schedule, to yield a fairly specific sequence of events between the time the system configuration decision is made through the point that you actually begin to see some total dissolved gas abatement from whatever measures are implemented. Would that be useful, from WDOE's perspective? Yes, Schlorff replied.

This being the case, it should be relatively simple to lift the relevant sections from these various documents to produce the kind of schedule or sequence of events I've been talking about, Schneider said. Peters observed that the actual amount of time required to produce the various implementation components, such as the Feature Design Memorandum, can vary considerably -- these are only estimates, he cautioned. Schneider suggested that the Corps could provide a range of time-frames required for completion of these various components of implementation -- six to twelve months, for example

In response to a question from Anderson, Schlorff said that these are all the comments WDOE will have on the draft gas abatement plan before the package in support of the 1998 spill program is delivered to WDOE -- it is not necessary to send the plan out for another round of comments before it is finalized.

Mary Lou Soscia raised the question of how the long-term gas abatement alternatives developed by Fred Olney's Three Sovereigns work group might fit into the package to be sent to WDOE. In response to another question, Schlorff said WDOE intends an initial five-year waiver period, recognizing that the terms and period of the waiver will almost certainly need to be revisited as new information becomes available. After some minutes of discussion, the group agreed that the information package already encompasses the range of options identified by Olney's workgroup, and that it is probably not necessary to reference that workgroup's findings in more detail in the package that will be sent to WDOE.

CRITFC's Bob Heinith observed that the full suite of gas abatement options includes both interim measures and long-term measures. There are a number of things we could be doing in the short term that would have a large effect on dissolved gas production in the system, he said -- for example, we could install flip-lips at Chief Joseph Dam. The Corps is already making decisions about whether or not to implement those short-term fixes; there is no reference to or funding for flow deflector installation at Chief Joseph in the Corps's FY'99 CRFM budget. It would be worthwhile for WDOE to give some thought to the level of dissolved gas they would like to see in the system by 2001, or by 2005, Heinith said. And that is essentially what we are asking the Corps to lay out for us, Schlorff said -- what can the Corps realistically be expected to achieve in terms of gas abatement over the next five years and beyond.

What about Grand Coulee? asked Bill Hevlin. Do you want to see a schedule for gas abatement work at that project? No, Schlorff replied -- that's a separate issue. The PUDs are also

trying to have to submit something to us similar to what we've asked the Corps to provide; it may be that the Bureau will be asked to install some gas abatement measures at Grand Coulee. However, in the context of today's discussion, Grand Coulee is a separate issue. One meeting participant made the point that the Corps' plans for end bay flip-lip construction at Ice Harbor and John Day should probably be included in the WDOE package; Peters said he had intended to include that information, and that this was an oversight on his part.

Where do we go from here with the submittal to WDOE? asked Boyce. I will take the comments provided at today's meeting, and incorporate those as best I can, Schneider replied. I will then sit down with Rock Peters, to be sure I haven't done irreparable damage to the document, and to see what other elements may need to be added, such as the John Day/Ice Harbor end bay flip-lip information. At that point, if we have a document we're satisfied with, I'll send it out to everyone here at the same time it is made available to WDOE, Schneider said. Heinith requested an opportunity to review the document before it is submitted to WDOE; Schneider agreed.

With that, the meeting was adjourned. Meeting notes prepared by Jeff Kuechle, BPA contractor.